Panasonic
ideas for life





Advanced Hybrid System

KX-TES824
KX-TEM824



The Best Solution

For Your Communication Needs



The telephone is your main source of communication - your link to business partners, customers, friends, and even your family members both inside and outside the office.
The KX-TES824 and KX-TEM824 Advanced Hybrid Systems are phone systems which can support your business and personal needs.
The KX-TES824 supports 3 outside (CO) lines and 8 extensions. The KX-TEM824 supports 6 outside (CO) lines and 16 extensions. With optional cards, you can easily expand your system capacity up to 8 outside (CO) lines and 24 extensions* as your needs grow.
Both systems provide the features that satisfy the demands of the most sophisticated and cost conscious users. You can connect a variety of communication devices, such as cordless phones, answering machines, computer modems, credit card verifiers, fax machines, and any other device that works with conventional telephone lines.
The Panasonic KX-TES824 and KX-TEM824 are ideal for a small business or home office requiring a flexible system with a high degree of sophistication.

* 8 of the extensions are ports used for Single Line Telephones.

Useful and Efficient Features

3-level Automatic Reception with Voice Guidance

The system offers DISA (Direct Inward System Access) function which allows outside callers to access any extension without going through an operator. Automatic greeting message (3-level) can be recorded by the operator or manager directing the caller to an appropriate section. "For the Sales Dept., press 1." (Level 1) "For the PBX group, press 2." (Level 2) "For Mark, press1." (Level 3) Callers can also dial the desired destination not only to an extension, but Ring Group*, or even outside lines.
When the system receives a fax transmission signal by DISA, it automatically connects the specified fax extension. Fax calls can be received day or night without an operator and there is no need for a special fax phone line.

* All phones in the group will ring simultaneously, allowing any member of the group to answer the call.

Built-in Voice Message (BV)*

Now you can enjoy the efficiency and ease of use of voice messaging without adding a separate voice mail system. The optional Voice Message Card ensures you'll never miss a call or important message from a customer or colleague. Customise your mailbox by recording your own greeting messages that are played when you can't answer your phone. Your callers can record their messages directly into your personal mailbox, allowing you to receive private information without relying on hand-written notes and memos. Call Centres and Workgroups can use the common message area for recording caller messages that can be played back later by an operator (manager). For more advanced voice messaging needs, a Panasonic Voice Processing System (VPS) gives you even more professional flexibility and control.

* An optional Voice Message Card is required.

Caller ID Display on SLTs and APTs*

- Caller Recognition
- Better Call Management

The system is compatible with Caller ID, which allows a user to see the caller's information on the displays of Single Line Telephones (SLTs) that supports Caller ID display and Analogue Proprietary Telephones (APTs). Proprietary display telephones can be used to access the Caller ID log for the 20 most recent calls (Call Log). And the system has 300 common logs. The logged incoming calls can be called back easily.

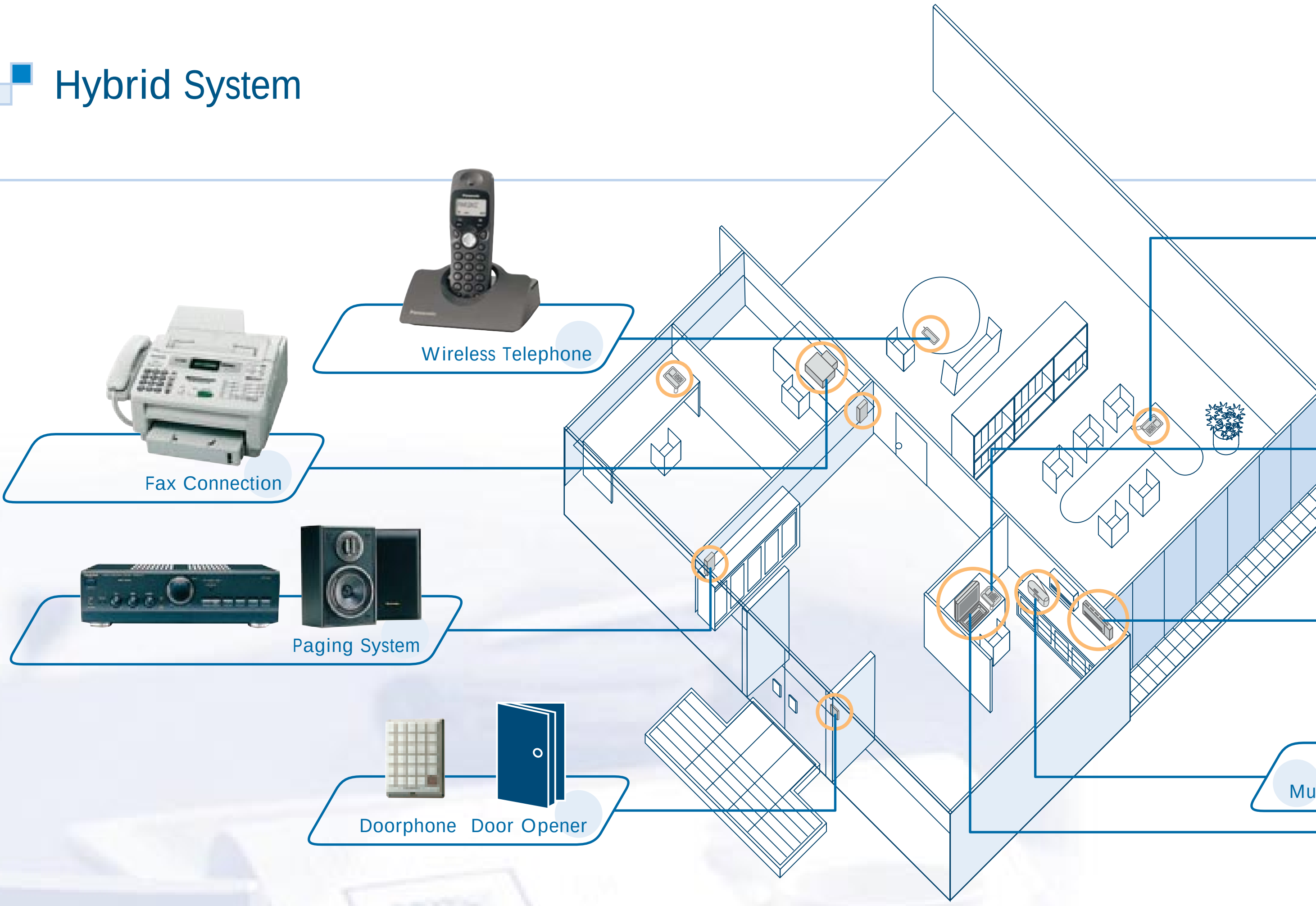
* An optional card is required.
Please contact your dealer or phone company to confirm if the Caller ID service is available in your area.

Flexible SMS Routing*

SMS (Short Message Service) messaging is an affordable and increasingly popular way to send text messages between fixed-line and mobile telephones. You can customise the system to allow SMS message senders to address their messages directly to a specific user's SLT (Single Line Telephone), ensuring their messages are received quickly, and privately, by the desired user.

* An optional Caller ID card and an SMS-compatible telephone is required to send and receive SMS messages. Please contact your dealer or phone company to confirm that Short Message Service is available in your area.

Hybrid System



Flexible and Simple Expansion

Panasonic offers you unprecedented flexibility and simple expansion with optional cards.
By adding optional cards, you can expand the system from 3 COs / 8 extensions to 8 COs / 24 extensions to meet your changing needs.
Neither additional programming nor costly rewiring is required.

Efficient Call Handling

UCD (Uniform Call Distribution) with message

- Improves the company image.
- Important business calls will not be missed.
- Shares the operator load.

For handling many incoming calls quickly and efficiently, this feature allows incoming calls to be distributed uniformly to a group of extensions. If all stations in the UCD group are busy, the system will play a message to the caller - acting like a receptionist. If still the UCD group remains busy, the call can be sent to a secondary DISA. This is especially useful for an office where many calls arrive at a group and there is only one person to take calls (queuing feature).

Call Forwarding (Busy / No Answer / Follow-Me / to Outside)

- Important business calls will not be missed.

Incoming, intercom and transferred calls to your extension can be forwarded to another destination when you are on the phone or away from your desk. Calls can be directed to a pre-programmed number, such as your mailbox, another phone, or even outside your office building, improving efficiency and overall customer service. "Follow me" programming allows you to remotely set Call Forwarding from another phone at your office (eg. meeting room), so calls to your extension will reach you while you are away from your desk.

Day / Night / Lunch Mode

The system provides "Day / Night" and "Lunch" mode features which can be used to change system functions according to the time of day. For example, you can designate which phones will ring for incoming calls after hours, or prevent outgoing calls at night.

Doorphones, Door Openers, and Doorbells*

Up to 4 doorphones can be connected to the system. When a visitor presses a doorphone button, the pre-assigned extension telephone will ring and the extension user can answer the call to talk to the visitor. Standard doorbells can also be connected to the system to indicate doorphone calls with the familiar chime sound. Doorphone calls can be indicated by ringing, by doorbell, or by both. If an optional Door Opener is connected, the extension user can even open the door and let the visitor in.

* An optional card is required.



Emergency Call

You can assign 5 numbers which can override toll restriction as an emergency call to the police, fire department, ambulance, etc.

5-party Conference

This feature allows 5 parties to have a telephone conversation at one time.
Up to 2 outside lines can join a conference call.

Room Monitor

An Analogue Proprietary Telephone or Doorphone can be used as a Room Monitor. This feature is useful for monitoring a child room or for security purposes.

Extension Group

The system supports 8 extension groups. In an extension group, the following features can be activated.

Group Call Pickup : Any member of an extension group can pick up a call directed to another member of your group.

Paging - Group : Any member of an extension group can make a voice announcement to another group member.
A hunting group, DISA ring group or UCD group is a specific extension group.

Ringing Pattern Selection

A ringing pattern can be selected depending on the type of call such as an outside call, intercom call and doorphone call. You can distinguish private calls from business calls.

Message Waiting*

Allows an extension user to notify the called extension of a message waiting when the called extension is busy or does not answer the call. Pressing the lit MESSAGE button of proprietary telephone can call back the called party automatically.

* Analogue Proprietary Telephone only.

Economical Cost Management

Calling Activity Reports (SMDR :Station Message Detail Recording)

The system can record or print out call information such as the date, time, extension number, dialled number, duration, etc. SMDR information can help you manage long distance call costs, staff productivity and phone system usage.

Account Code Entry (Option / Forced / Verified)

Account codes can be used to identify outgoing external calls for accounting and billing purposes. The calling activities made with ID codes can be printed out (SMDR). A “Verified Account Code” is very useful control toll costs, because a user dialling a long distance number must enter a valid account code to temporarily override toll restriction. Account codes can be used to manage your telephone expenses more effectively.

Toll Restriction

The system can be programmed to prohibit unauthorised outgoing long distance calls by restricting certain extensions from accessing specific area codes / exchange codes.

Electronic Station Lock

Prevents unauthorised personnel from making calls with your phone by “locking” your outside lines and requiring a 4-digit security code before making calls. The operator and manager are given the privilege of controlling Electronic Station Lock at any station by using the DSS console. For example, this feature is useful for a small hotel when guests have checked out.

Limited Call Duration

The system disconnects outside outgoing calls when a pre-programmed time expires. An alarm tone will be sent to both parties 15 seconds before the assigned time limit.

Easy Programming, Easy Maintenance

Intuitive Customisation and Maintenance

System customisation and maintenance is easier than ever, thanks to the included Panasonic KX-TE Maintenance Console software. Simply connect a PC to the system via the built-in USB or serial (RS-232C) interface, and the software's intuitive graphic interface will help you do the rest. The System Administrator can even program and maintain the system while off-site, by connecting remotely to the built-in modem. And of course, the familiar Panasonic PT Programming interface is also available, allowing you to quickly program the system using a PT.

Battery Backup Interface (Built - In)*

The system is equipped with a built-in battery interface which provides full system operation in the event of a power failure.

* An optional connecting cable is required.

Analogue Proprietary Telephones (APT)

Bringing a Sleek New Form to Communications

KX-T7735

3-Line Display, Speakerphone Unit

Alphanumeric LCD
3 line with a 16 character display provides useful information such as Absent Messages, call status, date and time, call duration, incoming call log of BV and Caller ID*

Programmable Keys with Dual Colour LED (Red / Green)
Enjoy one-touch operation of features such as Direct Station Selection (DSS), Log-In / Log-Out, Dual-colour LEDs show convenient information. A Busy Lamp Field (BLF) shows which extensions are in use.

Programmable Feature Keys

Call Forwarding / Do Not Disturb
Call forwarding transfers calls to a different telephone. The "Do Not Disturb" function blocks calls when you're busy.

Conference
For making multi-party calls.

Intercom
Use to make or receive an intercom call.

Flash / Recall
Use to disconnect a call without hanging up, then to reconnect or to send an EFA (External Feature Access) signal.

Auto Answer / Mute
Auto Answer: For use with intercom calls.
Mute: Listen in without being heard.

Headset Jack
Talk while using your keyboard.



Incoming Call / Message Lamp
This large, easy-to-see lamp announces incoming calls or messages, so you'll always know whose telephone is ringing – even from a distance.

Message
Use to leave a message-waiting indication, or to reply to one.

Pause
Inserts a pause in speed-dial numbers.

Transfer
For transferring calls to another extension or to voice mail.

Auto Dial / Store
For use with speed-dialling.

Tilt-Angle Adjustment
The telephone adjusts to either of two angles for easier use and a smaller, space-saving footprint.



Redial
For redialling.

Hold
Places a call on hold.

Speakerphone for Hands-Free Convenience
Dial or talk without picking up the handset.

Navigator Key
For quick adjustment of the volume and display contrast.

* An optional card is required.
Please contact your dealer or phone company to confirm if the Caller ID service is available in your area.



KX-T7730
LCD, Speakerphone Unit



KX-T7720
Speakerphone Unit



KX-T7750
Monitor Unit



KX-T7740
DSS Console

* Black model is available.

Feature / Model	KX-T7735	KX-T7730	KX-T7720	KX-T7750
Alphanumeric Display (Lines x Characters)	3 x 16	1 x 16	-	-
Programmable Keys with Dual Colour LED	12	12	12	12
Programmable Feature (PF) Keys	12	-	-	-
Feature Access Keys for LCD	Navigator Key	Navigator Key	-	-
Hands-Free Speech	●	●	●	Monitor
SP-Phone (Monitor) Volume Control	Navigator Key	Navigator Key	Up/Down Key	Up/Down Key
Handset Volume Control	Navigator Key	Navigator Key	Up/Down Key	Up/Down Key
Ringer Volume Control	Slide Switch (Off/Low/High)	Slide Switch (Off/Low/High)	Slide Switch (Off/Low/High)	Slide Switch (Off/Low/High)
Contrast Control	Navigator Key	Navigator Key	-	-
Incoming Call / Message Lamp	●	●	●	●
Auto Answer / Mute	●	●	●	-
Voice Call	-	-	-	●
Headset Compatible*	●	●	-	-

* Only a ϕ2.5mm pin jack is connectable. The use of KX-TCA87 is recommendable.

Features List

- Absent Message Capability
- Account Code Entry (Option / Forced / Verified)
- Alternate Calling - Ring / Voice
- Automatic Callback Busy (Camp-on)
- Automatic Configuration for Outside (CO) Line Type
- Automatic Fax Transfer
- Battery Backup Interface (Built - in)
- Built-in Voice Message (BV)*1
- Busy Station Signalling (BSS)
- Call Forwarding
  - All
  - Busy / No Answer
  - Follow Me
  - To Outside
- Caller ID Display on SLT and APT*1 *3
- Calling Party Control (CPC) Signal Detection*2
- Call Park
- Call Pickup
- Call Routing for Fixed Line SMS
- Call Splitting
- Call Transfer
  - To Extension
  - To Outside (CO) Line
- Call Waiting
- Conference (3-Party / 5 -Party)
- Conference, Unattended (3-Party)
- Data Line Security
- Direct in Line (DIL)
- DISA (Direct Inward System Access) with message (3-level, 1ch, 180sec)
- Distinctive Dial Tone
- DND (Do Not Disturb)
- DND Override
- Door Opener*1
- Doorphone Call*1
- DSS Console
- Emergency Call
- Executive Busy Override (Extension / CO Line)
- Executive Busy Override Deny
- Extension Group
- Extension Password / System Password
- External Feature Access
- Flexible Extension Numbering
- Handsfree Answerback
- Hold
- Intercept Routing
- Intercom Calling
- Limited Call Duration (1~32 minutes)
- Log-In / Log-Out
- Message Waiting
- Music on Hold / Background Music (BGM)
- One-Touch Dialling
- Operator Call
- Outgoing Message (OGM)
- Paging
  - All Extension
  - Group
  - External
- Paging Deny
- Parallel Telephone Connection
- Pickup Dialling (Hot Line)
- Polarity Reverse Detection*2
- Power Failure Transfer
- Preferred Line Assignment
  - Incoming
  - Outgoing
- Programming (via PT / PC)
- Pulse to Tone Conversion
- Redial
  - Automatic
  - Last Number
  - Saved Number
  - Logged Caller ID*1
- Ringing Pattern Selection
- Room Monitor (APT / Doorphone)
- Secret Dialling
- Speed Dialling
  - System
  - Personal
- Station Feature Clear
- Station Hunting
- Station Lock
- Station Lock, Remote
- SMDR (Station Message Detail Recording)
- Time (Day / Night / Lunch) Service
  - Automatic
  - Manual
- Timed Reminder
- Timed Reminder, Remote
- Toll Restriction
- Toll Restriction Override
- UCD (Uniform Call Distribution) with message
- Voice Mail Integration (APT / DTMF)
- Walking COS (Class of Service)

*1 An optional card is required.
*2 Polarity Reverse Detection is subject to the telephone company services in your country.
*3 Please contact your dealer or phone company to confirm if the Caller ID service is available in your area.
*4 Doorphone #1 and Doorphone #2 can not be used at the same time.
Doorphone #3 and Doorphone #4 can not be used at the same time.
APT: Analogue Proprietary Telephone
SLT: Single Line Telephone

Specifications

Configuration

Basic		Option (KX-TE82480) 2COs / 8 SLTs	Option (KX-TE82483) 3COs / 8 Hybrid Extensions	Option (KX-TE82474) 8 SLTs
KX-TES824	Outside (CO) Lines:3 Extensions : 8	→ 5 / 16		
		→	→ 6 / 16	
		→	→	→ 3 / 16
		→	→ 6 / 16	→ 6 / 24
		→ 5 / 16	→ 8 / 24	
KX-TEM824	Outside (CO) Lines:6 Extensions : 16	→	→	→ 6 / 24
		→ 8 / 24		

System Capacity (Max.)

ITEM	KX-TES/TEM824
Operator	1
System Speed Dialling	100
Personal Speed Dialling	10 / Ext.
One-Touch Dialling	Max 24 / Ext.
Extension Groups	8
UCD Group	1
Toll Restriction Levels	5
Account Codes (Verified)	50
Call Park	10
Call Log (Caller ID)*3	20 (Personal) 300 (Common)
Absent Messages	6
Message Waiting	8 / Ext.
Emergency Codes	5
External Music Source	1
External Pager	1
Doorphones	4
Door Openers	4
DSS Consoles	2
Outgoing Message (DISA)	360 sec
Outgoing Message (BV)	125 messages or 60 min. (/1 ch)

Specifications

ITEM	KX-TES824	KX-TEM824
Maximum Capacity	8COs 24 Extensions (16:Hybrid 8:SLT)	8COs 24 Extensions (16:Hybrid 8:SLT)
Intercom Paths	4	4
Dialling Method	External: Tone (DTMF) / Pulse (10 pps, 20 pps) Internal: Tone (DTMF) / Pulse (10 pps, 20 pps)	
Dialling Conversion	Pulse→DTMF	
Connections	CO Line: Modular Jack (2-wire) Intercom: Modular Jack (4-wire) Paging: Conductor Jack External Music: Conductor Jack SMDR: RS-232C I / F Port (9 pin D-SUB) Programming: RS-232C / USB / Remote modem	
SMDR	Detail Recording: Date, Time, Extension Number, CO Line Number, Dialled Number, Call Duration, Account Code, Caller ID*3	
Polarity Reverse Detection*2	Yes	Yes
Voice Mail Ports	2 ports (APT or DTMF)	4 ports (APT or DTMF)
DTMF Receivers	2	4
DTMF Generator	1	1
CO - CO Transfer Path	2	2
Power Failure Transfer Ports	1	2
Direct Connection to External Battery	Yes	Yes
Power Source	AC 110 - 240 V, 50/60 Hz	
Power Consumption	45W	58W
Dimensions (W x H x D)	368 mm x 284 mm x 102 mm	368 mm x 284 mm x 102 mm
Weight (when fully expanded)	Approx. 3.5 Kg	

Interfaces

RS-232C
USB (1.1)
Battery Interface
Doorphone / Door Opener
External Music Source
External Pager

Options

Option	Description	KX-TES824	KX-TEM824
KX-TE82460	2-Port Doorphone / Door Opener Card	Max.1	Max.1
KX-TE82461	4-Port Doorphone / Door Opener Interface Card*4	Max.1	Max.1
KX-TE82474	8-Port Single Line Telephone Extension Card	Max.1	Max.1
KX-TE82480	2-Port Analogue CO Line and 8-Port Single Line Telephone	Max.1	Max.1
KX-TE82483	3-Port Analogue CO Line and 8-Port Hybrid Extension Card	Max.1	
KX-TE82491	Message Expansion Card for OGM (1ch,180sec)	Max.1	Max.1
KX-TE82492	2-Channel Voice Message Card	Max.1	Max.1
KX-TE82493	3-Port Caller ID Card	Max.3	Max.3
KX-T30865	Doorphone	Max.4	Max.4
KX-A227	Back-up Battery Cable		

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Design and specifications are subject to change without notice. 10M125KY-TES/TEM824.X⑤ Printed in Japan